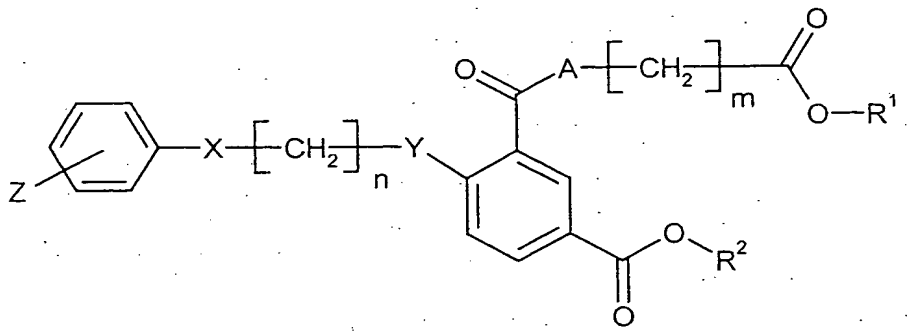
Claims

1. Compound of the formula

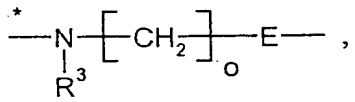


(I),

in which

A is a 4- to 7-membered nitrogen-containing saturated heterocycle which is bonded via the nitrogen atom to the keto group and which optionally has a carbonyl group adjacent to a nitrogen atom,

or

a radical  ,

in which

E is $(C_3$-$C_7)$-cycloalkanediyl, $(C_5$-$C_7)$-cycloalkenediyl or is 5- to 10-membered heterocyclyl which is bonded via a carbon atom to the $[CH_2]_o$ group,

o is 0, 1 or 2,

R^3 is hydrogen or $(C_1$-$C_6)$-alkyl, and

* is the point of linkage to the keto group,

m 0, 1 or 2,

n is 1, 2, 3 or 4,

R^1 is hydrogen or (C_1-C_6)-alkyl,

R^2 is hydrogen or (C_1-C_6)-alkyl,

X is a bond, -CH=CH-, -C≡C- or O,

Y is O, *-NH-C(=O)- or NH,

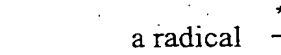
in which

* is the point of linkage to the phenyl ring,

and

Z is located in the position meta or para to the substituent X and is either (C_6-C_{10})-alkoxy which may comprise 1 or 2 further oxygen atoms in the chain,

or

a radical  ,

in which

G is a bond, O or S,

L is (C_1-C_6)-alkanediyl, (C_3-C_6)-alkenediyl or (C_3-C_6)-alkynediyl,

M is a bond, O or S,

R^4 is (C_6-C_{10})-aryl, biphenylyl, phenoxyphenyl, benzyloxyphenyl, (E)-phenylvinylphenyl, 2-phenylethylphenyl, tetrahydronaphthyl, benzyl, heteroaryl, 5- to 10-membered heterocyclyl, (C_3-C_7)-cycloalkyl or (C_3-C_7)-cycloalkylmethyl, where aryl, biphenylyl, phenoxyphenyl, benzyloxyphenyl, (E)-phenylvinylphenyl, 2-phenylethylphenyl, tetrahydronaphthyl, benzyl, heteroaryl, heterocyclyl, cycloalkyl and cycloalkylmethyl in turn may be substituted up to three times independently of one another by halogen, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C_1-C_6)-alkyl, (C_1-C_6)-alkoxy, (C_2-C_6)-alkenyl, (C_3-C_7)-cycloalkyl, (C_3-C_7)-cycloalkylmethoxy, (C_5-C_7)-cycloalkenyl, (C_3-C_7)-cycloalkoxy or (C_5-C_7)-cycloalkenyloxy, and

* is the point of linkage to the phenyl ring,

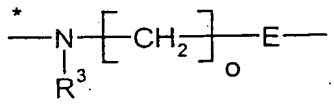
and the salts, hydrates, hydrates of the salts and solvates thereof.

2. Compound of the formula (I) according to Claim 1,

in which

A is a 4- to 6-membered nitrogen-containing saturated heterocycle which is bonded via the nitrogen atom to the keto group,

or

a radical  ,

in which

E is $(C_5$-$C_6)$-cycloalkanediyl,

o is 0 or 1,

R^3 is hydrogen, and

* is the point of linkage to the keto group,

m is 0 or 1,

n is 1, 2 or 3,

R^1 is hydrogen,

R^2 is hydrogen,

X is a bond or O,

Y is O or *-NH-C(=O)-,

in which

* is the point of linkage to the phenyl ring,

and

Z is located in the position meta or para to the substituent X and is either (C_7-C_9)-alkoxy, which may comprise 1 further oxygen atom in the chain,

or

a radical $\overset{*}{\text{—}}G\text{—}L\text{—}M\text{—}R^4$,

in which

G is a bond or O,

L is (C_1-C_6)-alkanediyl or (C_3-C_6)-alkenediyl,

M is a bond, O or S,

R^4 is phenyl, naphthyl, biphenylyl, phenoxyphenyl, benzyloxyphenyl, (E)-phenylvinylphenyl, 2-phenylethylphenyl, tetrahydronaphthyl, benzyl, 1,3-dioxanyl, 1,4-dioxanyl, dimethyl-1,3-dioxanyl, tetrahydro-2H-pyranyl, (C_3-C_7)-cycloalkyl or (C_3-C_7)-cycloalkylmethyl, where phenyl, naphthyl, biphenylyl, phenoxyphenyl, benzyloxyphenyl, (E)-phenylvinylphenyl, 2-phenylethylphenyl, tetrahydronaphthyl, benzyl, cycloalkyl and cycloalkylmethyl in turn may be substituted up to three times independently of one another by halogen, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C_1-C_6)-alkyl, (C_1-C_6)-alkoxy, (C_3-C_7)-cycloalkyl, (C_3-C_7)-cycloalkylmethoxy or (C_3-C_7)-cycloalkoxy, and

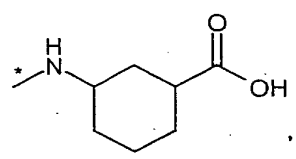
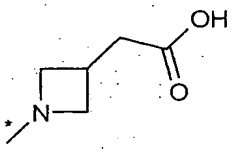
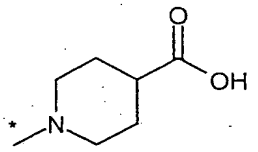
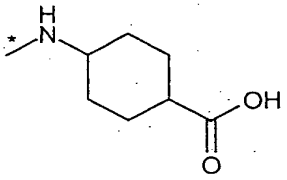
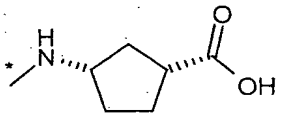
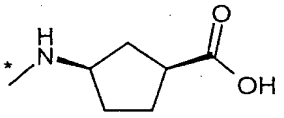
* is the point of linkage to the phenyl ring,

and the salts, hydrates, hydrates of the salts and solvates thereof.

3. Compound of the formula (I) according to Claim 1,

in which

$A\text{-}[CH_2]_m\text{-}CO_2R^1$ is a radical






or


in which

* is the point of linkage to the keto group,

n is 3,

R^2 is hydrogen,

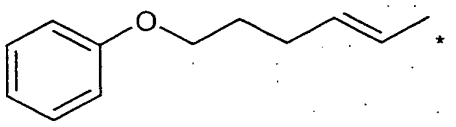
X is a bond,

Y is O,

and

Z is located in the position para to the substituent X and is either n-octyloxy, n-heptyloxy,

or

a radical 

in which

* is the point of linkage to the phenyl ring,

or

a radical $\overset{*}{\text{—}}G\text{—}L\text{—}M\text{—}R^4$,

in which

G is O,

L is methanediyl, n-propanediyl or n-butanediyl,

M is a bond or O,

R^4 is phenyl, 4-biphenylyl, 4-phenoxyphenyl, 4-benzyloxyphenyl, 1,2,3,4-tetrahydronaphth-6-yl, 5,5-dimethyl-1,3-dioxan-2-yl or cyclohexyl, where phenyl in turn may be substituted once by

halogen, trifluoromethoxy, (C_3-C_4)-alkyl, (C_3-C_4)-alkoxy, cyclopentyl, cyclohexyl or (C_3-C_6)-cycloalkylmethoxy, and

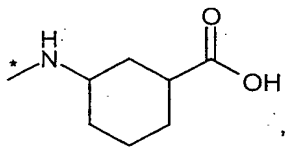
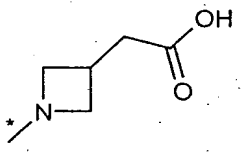
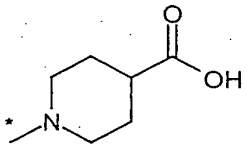
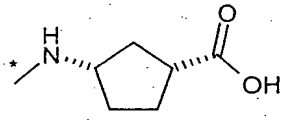
* is the point of linkage to the phenyl ring,

and the salts, hydrates, hydrates of the salts and solvates thereof.

4. Compound of the formula (I) according to Claim 1,

in which

$A\text{-}[CH_2]_m\text{-}CO_2R^1$ is a radical




or


in which

* is the point of linkage to the keto group,

n is 3,

R^2 is hydrogen,

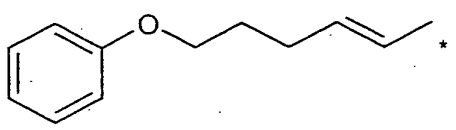
X is a bond,

Y is O,

and

Z is located in the position para to the substituent X, and is either n-octyloxy, n-heptyloxy,

or

a radical 

in which

* is the point of linkage to the phenyl ring,

or

a radical *-O-CH_2-R^4,

in which

R^4 is phenyl, 4-biphenylyl, 4-phenoxyphenyl, 4-benzyloxyphenyl or 1,2,3,4-tetrahydronaphth-6-yl, where phenyl in turn may be substituted once by trifluoromethoxy, n-propyl, n-butyl, tert-butyl, n-propyloxy, isopropyloxy, isobutyloxy, cyclohexyl or cyclopropylmethoxy, and

* is the point of linkage to the phenyl ring,

or

a radical *-O-CH_2-CH_2-CH_2-R^4,

in which

R^4 is 4-chlorophenyl, 5,5-dimethyl-1,3-dioxan-2-yl or cyclohexyl, and

* is the point of linkage to the phenyl ring,

or

a radical *-O-CH_2-CH_2-CH_2-CH_2-O-R^4,

in which

R^4 is phenyl or cyclohexyl, and

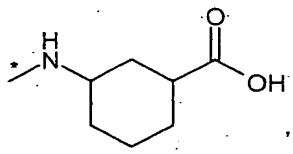
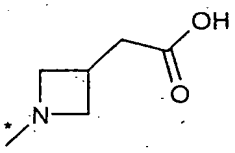
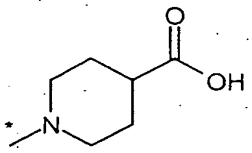
* is the point of linkage to the phenyl ring,

and the salts, hydrates, hydrates of the salts and solvates thereof.

5. Compound of the formula (I) according to Claim 1,

in which

A-$[CH_2]_m$-CO_2R^1 is a radical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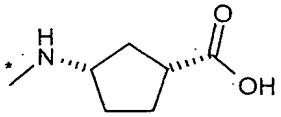


in which

* is the point of linkage to the keto group,

n is 3,

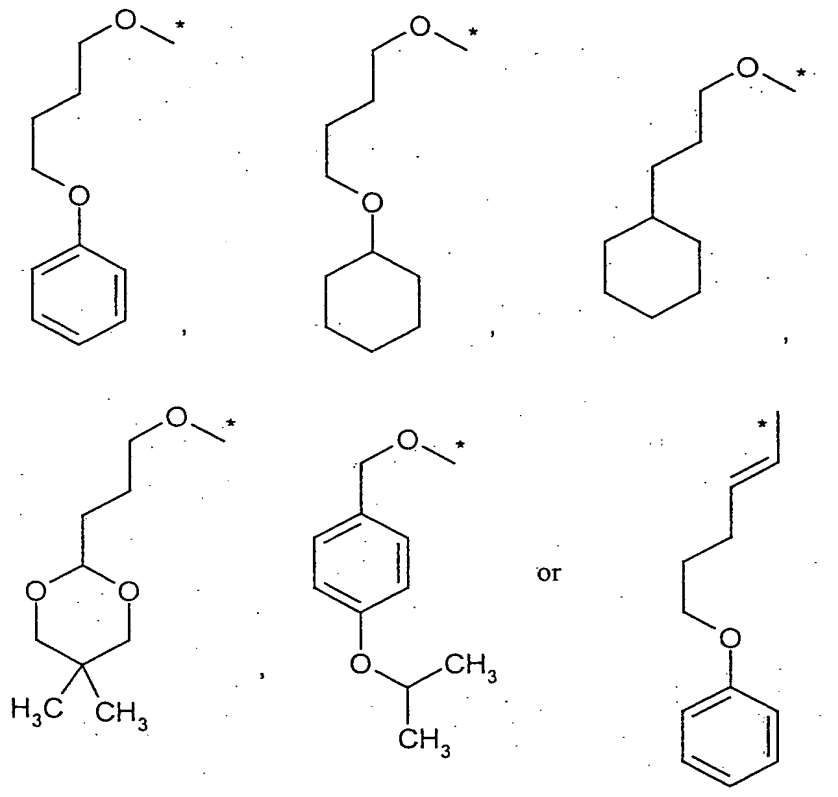
R^2 is hydrogen,

X is a bond,

Y is O,

and

Z is located in the position para to the substituent X and is a radical



in which

* is the point of linkage to the phenyl ring,

and the salts, hydrates, hydrates of the salts and solvates thereof.

6. Compound of the formula (I) according to Claim 1:

3-{[(3-carboxycyclohexyl)amino]carbonyl}-4-{3-[4-(4-phenoxybutoxy)-phenyl]propoxy}benzoic acid,

3-{[(3-carboxycyclohexyl)amino]carbonyl}-4-{3-[4-(3-cyclohexylpropoxy)-phenyl]propoxy}benzoic acid,

3-{[(3-carboxycyclohexyl)amino]carbonyl}-4-(3-{4-[4-(cyclohexyloxy)-butoxy]phenyl}propoxy)benzoic acid,

1-(5-carboxy-2-{3-[4-(3-cyclohexylpropoxy)phenyl]propoxy}benzoyl)-piperidine-4-carboxylic acid,

3-{[(3-carboxycyclohexyl)amino]carbonyl}-4-(3-{4-[(4-isopropoxybenzyl)-oxy]phenyl}propoxy)benzoic acid,

3-{[3-(carboxymethyl)azetidin-1-yl]carbonyl}-4-{3-[4-(3-cyclohexyl-propoxy)phenyl]propoxy}benzoic acid or

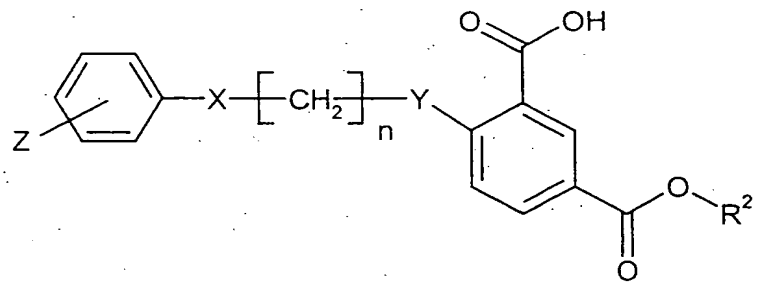
3-{[(3-carboxycyclohexyl)amino]carbonyl}-4-(3-{4-[(1E)-5-phenoxypent-1-en-1-yl]phenyl}propoxy)benzoic acid

and the salts, hydrates, hydrates of the salts and solvates thereof.

7. Process for preparing compounds of the formula (I) as defined in Claim 1, characterized in that

either

[A] compounds of the formula (II)



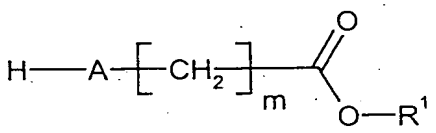
(II),

in which

R^2 is (C_1-C_6)-alkyl and

n, X, Y and Z have the meaning indicated in Claim 1,

are reacted with compounds of the formula (III)



(III),

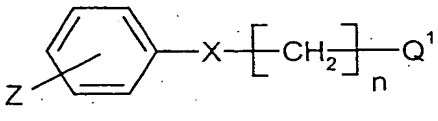
in which

R^1 is (C_1-C_6)-alkyl, and

m and A have the meaning indicated in Claim 1,

or

[B1] compounds of the formula (IVa)



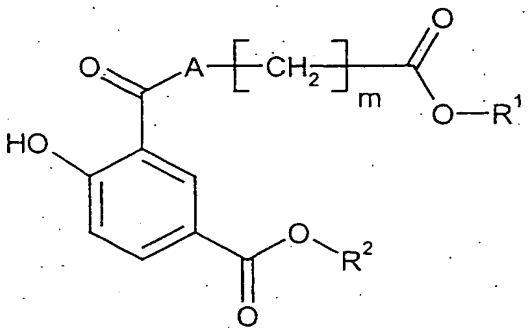
(IVa),

in which

Q^1 is a leaving group and

n, X and Z have the meaning indicated in Claim 1,

are reacted with compounds of the formula (Va)



(Va),

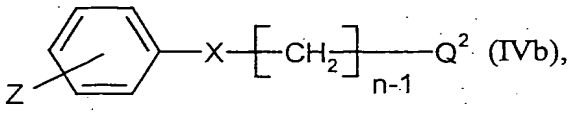
in which

R^1 and R^2 are (C_1-C_6)-alkyl, and

A and m have the meaning indicated in Claim 1,

or

[B2] compounds of the formula (IVb)



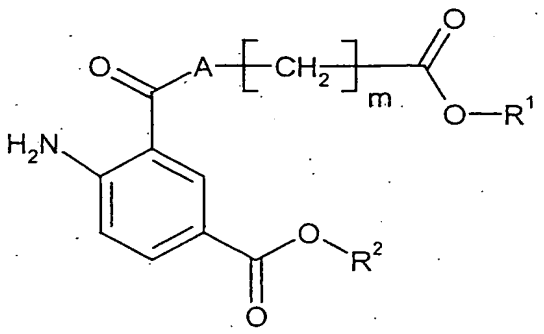
(IVb),

in which

Q^2 is an acid chloride group, and

n, X and Z have the meaning indicated in Claim 1,

are reacted with compounds of the formula (Vb)



(Vb),

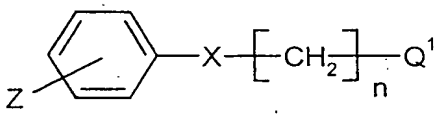
in which

R^1 and R^2 are (C_1-C_6)-alkyl, and

A and m have the meaning indicated in Claim 1,

or

[B3] compounds of the formula (IVa)



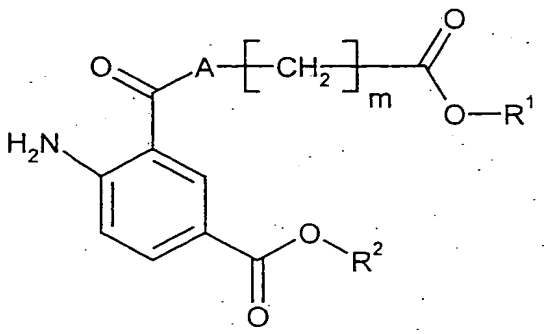
(IVa),

in which

Q^1 is a leaving group and

n, X and Z have the meaning indicated in Claim 1,

are reacted with compounds of the formula (Vb)



(Vb),

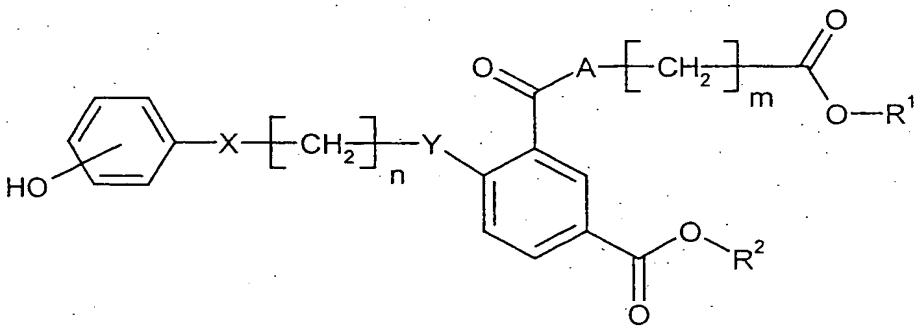
in which

R^1 and R^2 are (C_1-C_6)-alkyl, and

A and m have the meaning indicated in Claim 1,

or

[C] compounds of the formula (XII)



(XII),

in which

R^1 and R^2 are (C_1-C_6)-alkyl, and

n, m, X, Y and A have the meaning indicated in Claim 1,

are reacted with compounds of the formula (XIII)

$$R^4\text{-}M\text{-}L\text{-}Q^3 \quad (XIII),$$

in which

Q^3 is a leaving group and

R^4, M and L have the meaning indicated in Claim 1,

or

[D] the two ester groups in compounds prepared by process step [A], [B1], [B2], [B3] or [C] are hydrolysed.

8. Compound of the formula (I) as defined in Claim 1 for the treatment and/or prophylaxis of disorders.

9. Medicament comprising at least one compound of the formula (I) as defined in Claim 1 and at least one excipient.

10. Medicament comprising at least one compound of the formula (I) as defined in Claim 1 and at least one further active ingredient.

11. Use of compounds of the formula (I) as defined in Claim 1 for producing medicaments for the treatment and/or prophylaxis of cardiovascular disorders.

12. Use according to Claim 11 for the treatment and/or prophylaxis of unstable angina pectoris or myocardial infarction.